

FULLY AUTOMATED TELESCOPE SYSTEM
WITH DISTRIBUTED INTELLIGENCE

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ABSTRACT

5 A fully automated telescope system is able to be fully
operable in both Alt-Az and polar configurations. In either
configuration, the telescope aligns itself to be celestial
coordinate system following a simplified initialization procedure
during which the telescope tube is first pointed north and then
10 pointed towards a user's horizon. A command processor, under
application software program control orients the telescope system
with respect to the celestial coordinate system given the initial
directional inputs. The initial telescope orientation may be
further refined by initially inputting a geographical location
15 indicia, or by shooting one or two additional celestial objects.
Once the telescope's orientation with respect to the celestial
coordinate system is established, the telescope system will
automatically move to and track any desired celestial object
without further alignment invention by a user.